

SEQUENCE LISTING

<110> BOYLE, WILLIAM
HSU, HAILING

<120> RECEPTOR FROM TNF FAMILY

<130> A-570B

<140> NOT YET ASSIGNED

<141> 2001-02-12

<150> 60/181,800

<151> 2000-02-11

<160> 52

<170> PatentIn version 3.0

<210> 1

<211> 1173

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (143)..(997)

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cgc Arg	ctt Leu	act Thr	tct Ser	tgc Cys 15	ctt Leu	aag Lys	aaa Lys	aga Arg	gaa Glu 20	gaa Glu	atg Met	aaa Lys	ctg Leu	aag Lys 25	gag Glu	220
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tgc Cys	tgc Cys 60	ctc Leu	acg Thr	gtg Val	gtg Val	tct Ser 65	ttc Phe	tac Tyr	cag Gln	gtg Val	gcc Ala 70	gcc Ala	ctg Leu	caa Gln	ggg Gly	364
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ctg Leu	cca Pro	gca Ala	gga Gly 95	gca Ala	gga Gly	gcc Ala	ccc Pro	aag Lys	gcc Ala 100	ggc Gly	ctg Leu	gag Glu	gaa Glu	gct Ala 105	cca Pro	460
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ggc Gly	aac Asn	tcc Ser 125	agt Ser	cag Gln	aac Asn	agc Ser	aga Arg 130	aat Asn	aag Lys	cgt Arg	gcc Ala	gtt Val 135	cag Gln	ggg Gly	cca Pro	556
gaa Glu 140	gaa Glu	aca Thr	gtc Val	act Thr	caa Gln	gac Asp 145	tgc Cys	ttg Leu	caa Gln	ctg Leu	att Ile 150	gca Ala	gac Asp	agt Ser	gaa Glu	604
aca Thr 155	cca Pro	act Thr	ata Ile	caa Gln	aaa Lys 160	gga Gly	tct Ser	tac Tyr	aca Thr	ttt Phe 165	gtt Val	cca Pro	tggt Trp	ctt Leu	ctc Leu 170	652
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gtc Val	ttt Phe 220	ggg Gly	gat Asp	gaa Glu	ttg Leu	agt Ser 225	ctg Leu	gtg Val	act Thr	ttg Leu	ttt Phe 230	cga Arg	tgt Cys	att Ile	caa Gln	844
aat Asn 235	atg Met	cct Pro	gaa Glu	aca Thr	cta Leu 240	ccc Pro	aat Asn	aat Asn	tcc Ser	tgc Cys 245	tat Tyr	tca Ser	gct Ala	ggc Gly	att Ile 250	892
gca Ala	aaa Lys	ctg Leu	gaa Glu	gaa Glu 255	gga Gly	gat Asp	gaa Glu	ctc Leu	caa Gln 260	ctt Leu	gca Ala	ata Ile	cca Pro	aga Arg 265	gaa Glu	940

aaa ctg ctg /tgacctactt acaccatgtc tgtagctatt ttctctcctt 1037
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<211> 285

<212> PRT

<213> Homo sapiens

<400> 2

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20 25 30

Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu / Ser Cys Cys Leu Thr Val Val
50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
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<210> 3

<211> 1139

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (52)..(978)

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Glu Ser Ala Lys Thr Leu Pro Pro Cys Leu Cys Phe Cys Ser Glu
5 10 15

aaa gga gaa gat atg aaa gtg gga tat gat ccc atc act ccg cag aag 153

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Glu	Glu	Gly	Ala	Trp	Phe	Gly	Ile	Cys	Arg	Asp	Gly	Arg	Leu	Leu	Ala	50	
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gct	acc	ctc	ctg	ctg	gcc	ctg	ttg	tcc	agc	agt	ttc	aca	gcg	atg	tcc	249	
Ala	Thr	Leu	Leu	Leu	Ala	Leu	Leu	Ser	Ser	Ser	Phe	Thr	Ala	Met	Ser	65	
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ttg	tac	cag	ttg	gct	gcc	ttg	caa	gca	gac	ctg	atg	aac	ctg	cgc	atg	297	
Leu	Tyr	Gln	Leu	Ala	Ala	Leu	Gln	Ala	Asp	Leu	Met	Asn	Leu	Arg	Met	80	
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Glu	Leu	Gln	Ser	Tyr	Arg	Gly	Ser	Ala	Thr	Pro	Ala	Ala	Ala	Gly	Ala	95	
		85					90										
cca	gag	ttg	acc	gct	gga	gtc	aaa	ctc	ctg	aca	ccg	gca	gct	cct	cga	393	
Pro	Glu	Leu	Thr	Ala	Gly	Val	Lys	Leu	Leu	Thr	Pro	Ala	Ala	Pro	Arg	110	
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ccc	cac	aac	tcc	agc	cgc	ggc	cac	agg	aac	aga	cgc	gct	ttc	cag	gga	441	
Pro	His	Asn	Ser	Ser	Arg	Gly	His	Arg	Asn	Arg	Arg	Ala	Phe	Gln	Gly	130	
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cca	gag	gaa	aca	gaa	caa	gat	gta	gac	ctc	tca	gct	cct	cct	gca	cca	489	
Pro	Glu	Glu	Thr	Glu	Gln	Asp	Val	Asp	Leu	Ser	Ala	Pro	Pro	Ala	Pro	145	
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tgc	ctg	cct	gga	tgc	cgc	cat	tct	caa	cat	gat	gat	aat	gga	atg	aac	537	
Cys	Leu	Pro	Gly	Cys	Arg	His	Ser	Gln	His	Asp	Asp	Asn	Gly	Met	Asn	160	
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ctc	aga	aac	atc	att	caa	gac	tgt	ctg	cag	ctg	att	gca	gac	agc	gac	585	
Leu	Arg	Asn	Ile	Ile	Gln	Asp	Cys	Leu	Gln	Leu	Ile	Ala	Asp	Ser	Asp	175	
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Thr	Pro	Thr	Ile	Arg	Lys	Gly	Thr	Tyr	Thr	Phe	Val	Pro	Trp	Leu	Leu	190	
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agc	ttt	aaa	aga	gga	aat	gcc	ttg	gag	gag	aaa	gag	aac	aaa	ata	gtg	681	
Ser	Phe	Lys	Arg	Gly	Asn	Ala	Leu	Glu	Glu	Lys	Glu	Asn	Lys	Ile	Val	210	
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Val	Arg	Gln	Thr	Gly	Tyr	Phe	Phe	Ile	Tyr	Ser	Gln	Val	Leu	Tyr	Thr	225	
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Asp	Pro	Ile	Phe	Ala	Met	Gly	His	Val	Ile	Gln	Arg	Lys	Lys	Val	His	240	
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Val	Phe	Gly	Asp	Glu	Leu	Ser	Leu	Val	Thr	Leu	Phe	Arg	Cys	Ile	Gln	255	
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Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu
275 280 285 290

aat gca cag att tca cgc aac gga gac gac acc ttc ttt ggt gcc cta 969
Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu
295 300 305

aaa ctg ctg taactcactt gctggagtgc gtgatcccct tccctcgtct 1018
Lys Leu Leu

tctctgtacc tccgagggag aaacagacga ctggaaaaat aaaagatggg gaaagccgtc 1078
agcgaaagtt ttctcgtgac ccgttgaatc tgatccaaac caggaaatat aacagacagc 1138
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<210> 4

<211> 309

<212> PRT

<213> Mus musculus

<400> 4

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Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro
20 25 30

Gln Lys Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu
35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala
50 55 60

Met Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu
65 70 75 80

Arg Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala
85 90 95

Gly Ala Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala
100 105 110

Pro Arg Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe
115 120 125

Gln Gly Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro
130 135 140

Ala Pro Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly
145 150 155 160

Met Asn Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp
165 170 175

Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp
180 185 190

Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys
195 200 205

Ile Val Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu
210 215 220

Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys
225 230 235 240

Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys
245 250 255

Ile Gln Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Leu Ala
260 265 270

Gly Ile Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro
275 280 285

Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly
290 295 300

Ala Leu Lys Leu Leu
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<210> 5

<211> 278

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> X = one or more naturally occurring amino acid residues.

<210>	6
<211>	102
<212>	PRT
<213>	Consensus

<220>

<221> misc_feature

<223> X = one or more any naturally occurring amino acid residues.

<400> 6

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Ser Xaa Gly Val Xaa Leu Xaa Asn Xaa Leu Val Val Xaa Gly Leu Tyr
20 25 30
Phe Ile Tyr Ser Gln Val Xaa Phe Xaa Gly Gln Xaa Cys Pro Xaa Val
35 40 45
Xaa Leu Xaa His Xaa Val Xaa Val Xaa Tyr Pro Xaa Leu Leu Ser Xaa
50 55 60
Thr Xaa Cys Xaa Trp Xaa Ser Xaa Tyr Leu Gly Gly Val Phe Xaa Leu
65 70 75 80
Xaa Gly Asp Xaa Leu Tyr Val Asn Val Xaa Ser Xaa Phe Xaa Thr Phe
85 90 95
Phe Gly Leu Phe Lys Leu
100

<210> 7

<211> 143

<212> PRT

<213> Homo sapiens

<400> 7

Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn
1 5 10 15
Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu
20 25 30
Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Leu Asn Glu Thr
35 40 45
Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60
Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr
65 70 75 80
Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser Tyr Cys Thr
85 90 95
Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn

100 105 110
Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu
115 120 125
Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 8

<211> 143

<212> PRT

<213> Mus musculus

<400> 8

Glu Lys Lys Glu Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro His
1 5 10 15
Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
20 25 30
Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Thr
35 40 45
Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60
Asn Asn Gln Pro Ile Asn His Lys Val Tyr Met Arg Asn Ser Lys Tyr
65 70 75 80
Pro Glu Asp Leu Val Leu Met Glu Glu Lys Arg Leu Asn Tyr Cys Thr
85 90 95
Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110
Leu Thr Ser Ala Asp His Leu Val Tyr Asn Ile Ser Gln Leu Ser Leu
115 120 125
Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 9

<211> 143

<212> PRT

<213> Rattus rattus

<400> 9

Glu Thr Lys Lys Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro Arg
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Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
20 25 30

Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Ala
35 40 45
Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60
Asn Ser Gln Pro Leu Ser His Lys Val Tyr Met Arg Asn Phe Lys Tyr
65 70 75 80
Pro Gly Asp Leu Val Leu Met Glu Glu Lys Lys Leu Asn Tyr Cys Thr
85 90 95
Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110
Leu Thr Val Ala Asp His Leu Tyr Val Asn Ile Ser Gln Leu Ser Leu
115 120 125
Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140
<210> 10
<211> 146
<212> PRT
<213> Homo sapiens

<400> 10
Gly Asp Gln Asn Pro Gln Ile Ala Ala Arg Val Ile Ser Glu Ala Ser
1 5 10 15
Ser Lys Thr Thr Ser Val Leu Gln Trp Ala Glu Lys Gly Tyr Tyr Thr
20 25 30
Met Ser Asn Asn Leu Val Thr Leu Glu Asn Gly Lys Gln Leu Thr Val
35 40 45
Lys Arg Gln Gly Leu Tyr Tyr Ile Tyr Ala Gln Val Thr Phe Cys Ser
50 55 60
Asn Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu
65 70 75 80
Lys Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr
85 90 95
His Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly
100 105 110
Val Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp
115 120 125
Pro Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu
130 135 140
Lys Leu
145

<210> 11
 <211> 146
 <212> PRT
 <213> Mus musculus

<400> 11

Gly Asp Glu Asp Pro Gln Ile Ala Ala His Val Val Ser Glu Ala Asn
 1 5 10 15
 Ser Asn Ala Ala Ser Val Leu Gln Trp Ala Lys Lys Gly Tyr Tyr Thr
 20 25 30
 Met Lys Ser Asn Leu Val Met Leu Glu Asn Gly Lys Gln Leu Thr Val
 35 40 45
 Lys Arg Glu Gly Leu Tyr Tyr Val Tyr Thr Gln Val Thr Phe Gln Ser
 50 55 60
 Asn Arg Glu Pro Ser Ser Gln Arg Pro Phe Ile Val Gly Leu Trp Leu
 65 70 75 80
 Lys Pro Ser Ile Gly Ser Glu Arg Ile Leu Leu Lys Ala Ala Asn Thr
 85 90 95
 His Ser Ser Ser Gln Leu Cys Glu Gln Gln Ser Val His Leu Gly Gly
 100 105 110
 Val Phe Glu Leu Gln Ala Gly Ala Ser Val Phe Val Asn Val Thr Glu
 115 120 125
 Ala Ser Gln Val Ile His Arg Val Gly Phe Ser Ser Phe Gly Leu Leu
 130 135 140
 Lys Leu
 145

<210> 12
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 12

Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr
 1 5 10 15
 Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys
 20 25 30
 Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu
 35 40 45
 Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr

50 55 60
Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly
65 70 75 80
Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro
85 90 95
Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu
100 105 110
Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln
115 120 125
Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
130 135 140

<210> 13

<211> 147

<212> PRT

<213> Mus musculus

<400> 13

Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Asp
1 5 10 15
Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp Leu Leu
20 25 30
Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys Ile Val
35 40 45
Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr
50 55 60
Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His
65 70 75 80
Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln
85 90 95
Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile
100 105 110
Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu
115 120 125
Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu
130 135 140
Lys Leu Leu
145

<210> 14

<211> 160

<212> PRT

<213> Mus musculus

<400> 14

Gly Lys Pro Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala
1 5 10 15
Ser Ile Pro Ser Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His
20 25 30
Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Leu Ser Asn Gly Lys
35 40 45
Leu Arg Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60
Phe Arg His His Glu Thr Ser Gly Ser Val Pro Thr Asp Tyr Leu Gln
65 70 75 80
Leu Met Val Tyr Val Val Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95
Asn Leu Met Lys Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu
100 105 110
Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ala
115 120 125
Gly Glu Glu Ile Ser Ile Gln Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140
Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Gln Asp Ile Asp
145 150 155 160

<210> 15

<211> 160

<212> PRT

<213> Homo sapiens

<400> 15

Ser Lys Leu Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr
1 5 10 15
Asp Ile Pro Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His
20 25 30
Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Phe Ser Asn Gly Lys
35 40 45
Leu Ile Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60
Phe Arg His His Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln
65 70 75 80

Leu Met Val Tyr Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95
Thr Leu Met Lys Gly Gly Ser Thr Lys Tyr Trp Ser Gly Asn Ser Glu
100 105 110
Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser
115 120 125
Gly Glu Glu Ile Ser Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140
Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Arg Asp Ile Asp
145 150 155 160

<210> 16

<211> 166

<212> PRT

<213> Homo sapiens

<400> 16

Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr Arg Gly
1 5 10 15
Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu
20 25 30
Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe
35 40 45
Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys
50 55 60
Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Glu
65 70 75 80
Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr
85 90 95
Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg
100 105 110
Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr
115 120 125
Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser
130 135 140
Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser Phe Phe
145 150 155 160
Gly Ala Phe Leu Val Gly
165

<210> 17

<211> 172

<212> PRT

<213> Mus musculus

<400> 17

Gly	Gly	Arg	Pro	Gln	Lys	Val	Ala	Ala	His	Ile	Thr	Gly	Ile	Thr	Arg
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Arg	Ser	Asn	Ser	Ala	Leu	Ile	Pro	Ile	Ser	Lys	Asp	Gly	Lys	Thr	Leu
		20						25					30		
Gly	Gln	Lys	Ile	Glu	Ser	Trp	Glu	Ser	Ser	Arg	Lys	Gly	His	Ser	Phe
		35					40					45			
Leu	Asn	His	Val	Leu	Phe	Arg	Asn	Gly	Glu	Leu	Val	Ile	Glu	Gln	Glu
	50					55					60				
Gly	Leu	Tyr	Tyr	Ile	Tyr	Ser	Gln	Thr	Tyr	Phe	Arg	Phe	Gln	Glu	Ala
65					70					75					80
Glu	Asp	Ala	Ser	Lys	Met	Val	Ser	Lys	Asp	Lys	Val	Arg	Thr	Lys	Gln
				85					90					95	
Leu	Val	Gln	Tyr	Ile	Tyr	Lys	Tyr	Thr	Ser	Tyr	Pro	Asp	Pro	Ile	Val
			100					105					110		
Leu	Met	Lys	Ser	Ala	Arg	Asn	Ser	Cys	Trp	Ser	Arg	Asp	Ala	Glu	Tyr
		115					120					125			
Gly	Leu	Tyr	Ser	Ile	Tyr	Gln	Gly	Gly	Leu	Phe	Glu	Leu	Lys	Lys	Asn
	130					135					140				
Asp	Arg	Ile	Phe	Val	Ser	Val	Thr	Asn	Glu	His	Leu	Met	Asp	Leu	Asp
145					150					155					160
Gln	Glu	Ala	Ser	Phe	Phe	Gly	Ala	Phe	Leu	Ile	Asn				
				165					170						

<210> 18

<211> 143

<212> PRT

<213> Homo sapiens

<400> 18

Arg	Ala	Pro	Phe	Lys	Lys	Ser	Trp	Ala	Tyr	Leu	Gln	Val	Ala	Lys	His
1				5					10					15	
Leu	Asn	Lys	Thr	Lys	Leu	Ser	Trp	Asn	Lys	Asp	Gly	Ile	Leu	His	Gly
			20					25					30		
Val	Arg	Tyr	Gln	Asp	Gly	Asn	Leu	Val	Ile	Gln	Phe	Pro	Gly	Leu	Tyr
		35					40					45			

Phe Ile Ile Cys Gln Leu Gln Phe Leu Val Gln Cys Pro Asn Asn Ser
50 55 60
Val Asp Leu Lys Leu Glu Leu Leu Ile Asn Lys His Ile Lys Lys Gln
65 70 75 80
Ala Leu Val Thr Val Cys Glu Ser Gly Met Gln Thr Lys His Val Tyr
85 90 95
Gln Asn Leu Ser Gln Phe Leu Leu Asp Tyr Leu Gln Val Asn Thr Thr
100 105 110
Ile Ser Val Asn Val Asp Thr Phe Gln Tyr Ile Asp Thr Ser Thr Phe
115 120 125
Pro Leu Glu Asn Val Leu Ser Ile Phe Leu Tyr Ser Asn Ser Asp
130 135 140

<210> 19

<211> 143

<212> PRT

<213> Mus musculus

<400> 19

Ser Thr Pro Ser Lys Lys Ser Trp Ala Tyr Leu Gln Val Ser Lys His
1 5 10 15
Leu Asn Asn Thr Lys Leu Ser Trp Asn Glu Asp Gly Thr Ile His Gly
20 25 30
Leu Ile Tyr Gln Asp Gly Asn Leu Ile Val Gln Phe Pro Gly Leu Tyr
35 40 45
Phe Ile Val Cys Gln Leu Gln Phe Leu Val Gln Cys Ser Asn His Ser
50 55 60
Val Asp Leu Thr Leu Gln Leu Leu Ile Asn Ser Lys Ile Lys Lys Gln
65 70 75 80
Thr Leu Val Thr Val Cys Glu Ser Gly Val Gln Ser Lys Asn Ile Tyr
85 90 95
Gln Asn Leu Ser Gln Phe Leu Leu His Tyr Leu Gln Val Asn Ser Thr
100 105 110
Ile Ser Val Arg Val Asp Asn Phe Gln Tyr Val Asp Thr Asn Thr Phe
115 120 125
Pro Leu Asp Asn Val Leu Ser Val Phe Leu Tyr Ser Ser Ser Asp
130 135 140

<210> 20

<211> 163

<212> PRT

<213> Homo sapiens

<400> 20

Asp Leu Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu
1 5 10 15
Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu
20 25 30
Thr Ser Gly Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln
35 40 45
Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala
50 55 60
Pro Pro Gly Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser
65 70 75 80
Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu
85 90 95
Leu Leu Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg
100 105 110
Arg Gln Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly
115 120 125
Leu Val Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His
130 135 140
Pro Asp Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val
145 150 155 160
Met Val Gly

<210> 21

<211> 159

<212> PRT

<213> Mus musculus

<400> 21

Asp Leu Asn Pro Glu Leu Pro Ala Ala His Leu Ile Gly Ala Trp Met
1 5 10 15
Ser Gly Gln Gly Leu Ser Trp Glu Ala Ser Gln Glu Glu Ala Phe Leu
20 25 30
Arg Ser Gly Ala Gln Phe Ser Pro Thr His Gly Leu Ala Leu Pro Gln
35 40 45
Asp Gly Val Tyr Tyr Leu Tyr Cys His Val Gly Tyr Arg Gly Arg Thr
50 55 60
Pro Pro Ala Gly Arg Ser Arg Ala Arg Ser Leu Thr Leu Arg Ser Ala

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<210> 22
<211> 149
<212> PRT
<213> Homo sapiens
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[illegible]

$\langle 210 \rangle$	23
$\langle 211 \rangle$	149

<212> PRT

<213> Mus musculus

<400> 23

Thr His Gly Ile Leu Lys Pro Ala Ala His Leu Val Gly Tyr Pro Ser
1 5 10 15
Lys Gln Asn Ser Leu Leu Trp Arg Ala Ser Thr Asp Arg Ala Phe Leu
20 25 30
Arg His Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Ile Pro Thr Ser
35 40 45
Gly Leu Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Glu Ser Cys
50 55 60
Ser Pro Arg Ala Ile Pro Thr Pro Ile Tyr Leu Ala His Glu Val Gln
65 70 75 80
Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ala Gln
85 90 95
Lys Ser Val Tyr Pro Gly Leu Gln Gly Pro Trp Val Arg Ser Met Tyr
100 105 110
Gln Gly Ala Val Phe Leu Leu Ser Lys Gly Asp Gln Leu Ser Thr His
115 120 125
Thr Asp Gly Ile Ser His Leu His Phe Ser Pro Ser Ser Val Phe Phe
130 135 140
Gly Ala Phe Ala Leu
145

<210> 24

<211> 152

<212> PRT

<213> Homo sapiens

<400> 24

Arg Thr Pro Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln
1 5 10 15
Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu
20 25 30
Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu
35 40 45
Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys
50 55 60
Pro Ser Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val
65 70 75 80

$\langle 220 \rangle$

<221> misc_feature

<223> Position 5, X = any naturally occurring amino acid residue.

<400> 26

Ala Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp
1 5 10 15
Glu Leu Ser Leu Val Thr Leu Phe Arg
20 25

<210> 27

<211> 142

<212> PRT

<213> Artificial

<220>

<223> Description of Artificial Sequence:CONSENSUS

<220>

<221> misc_feature

<223> Positions 43, 45, 46, 54, 61-63, 68, 95, 109, 116, 129, 130, 133:
X = any naturally occurring amino acid residue

<400> 27

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa
1 5 10 15
Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly
20 25 30
Xaa Ala Leu Glu Glu Lys Glu Asn Lys Ile Xaa Val Xaa Xaa Thr Gly
35 40 45
Tyr Phe Phe Ile Tyr Xaa Gln Val Leu Tyr Thr Asp Xaa Xaa Xaa Ala
50 55 60
Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu
65 70 75 80
Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Xaa Thr
85 90 95
Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Xaa Leu Glu Glu
100 105 110
Gly Asp Glu Xaa Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser
115 120 125
Xaa Xaa Gly Asp Xaa Thr Phe Phe Gly Ala Leu Lys Leu Leu

$\langle 210 \rangle$	32
$\langle 211 \rangle$	25
$\langle 212 \rangle$	DNA

25

<400> 36
atttgattct agaaggagga ataacatatg aacagccgta ataagcgtgc cgttcagggt 60

<210> 37
<211> 45
<212> DNA
<213> Homo sapiens

<400> 37
ccgcggatcc tcgagttaca gcagtttcaa tgcaccaaaa aatgt

45

<210> 38
<211> 17
<212> PRT
<213> Homo sapiens

<400> 38
Met Asp Tyr Lys Asp Asp Asp Asp Lys Lys Leu Asn Ser Arg Asn Lys
1 5 10 15
Arg

<210> 39
<211> 48
<212> DNA
<213> Homo sapiens

<400> 39
gacgatgaca agaagcttaa cagccgtaat aagcgtgccg ttcagggt

48

<210> 40
<211> 151
<212> PRT
<213> Mus musculus

<400> 40
Gln Asn Ser Ser Asp Lys Pro Val Ala His Val Val Ala Asn His Gln
1 5 10 15
Val Glu Glu Gln Leu Glu Trp Leu Ser Gln Arg Ala Asn Ala Leu Leu
20 25 30

Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu Val Val Pro Ala Asp
 35 40 45
 Gly Leu Tyr Leu Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys
 50 55 60
 Pro Asp Tyr Val Leu Leu Thr His Thr Val Ser Arg Phe Ala Ile Ser
 65 70 75 80
 Tyr Gln Glu Lys Val Asn Leu Leu Ser Ala Val Lys Ser Pro Cys Pro
 85 90 95
 Lys Asp Thr Pro Glu Gly Ala Glu Leu Lys Pro Trp Tyr Glu Pro Ile
 100 105 110
 Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Gln Leu Ser Ala
 115 120 125
 Glu Val Asn Leu Pro Lys Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val
 130 135 140
 Tyr Phe Gly Val Ile Ala Leu
 145 150

<210> 41
 <211> 1340
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> CDS
 <222> (28) .. (906)

<400> 41
 gtcgacccac gcgtccgatc ctgagta atg agt ggc ctg ggc cgg agc agg cga 54
 Met Ser Gly Leu Gly Arg Ser Arg Arg
 1 5
 ggt ggc cgg agc cgt gtg gac cag gag gag cgc ttt cca cag ggc ctg 102
 Gly Gly Arg Ser Arg Val Asp Gln Glu Glu Arg Phe Pro Gln Gly Leu
 10 15 20 25
 tgg aca ggg gtg gct atg aga tcc tgc ccc gaa gag cag tac tgg gat 150
 Trp Thr Gly Val Ala Met Arg Ser Cys Pro Glu Glu Gln Tyr Trp Asp
 30 35 40
 cct ctg ctg ggt acc tgc atg tcc tgc aaa acc att tgc aac cat cag 198
 Pro Leu Leu Gly Thr Cys Met Ser Cys Lys Thr Ile Cys Asn His Gln
 45 50 55
 agc cag cgc acc tgt gca gcc ttc tgc agg tca ctc agc tgc cgc aag 246
 Ser Gln Arg Thr Cys Ala Ala Phe Cys Arg Ser Leu Ser Cys Arg Lys
 60 65 70

gag	caa	ggc	aag	ttc	tat	gac	cat	ctc	ctg	agg	gac	tgc	atc	agc	tgt	294
Glu	Gln	Gly	Lys	Phe	Tyr	Asp	His	Leu	Leu	Arg	Asp	Cys	Ile	Ser	Cys	
75						80					85					
gcc	tcc	atc	tgt	gga	cag	cac	cct	aag	caa	tgt	gca	tac	ttc	tgt	gag	342
Ala	Ser	Ile	Cys	Gly	Gln	His	Pro	Lys	Gln	Cys	Ala	Tyr	Phe	Cys	Glu	
90					95					100					105	
aac	aag	ctc	agg	agc	cca	gtg	aac	ctt	cca	cca	gag	ctc	agg	aga	cag	390
Asn	Lys	Leu	Arg	Ser	Pro	Val	Asn	Leu	Pro	Pro	Glu	Leu	Arg	Arg	Gln	
				110					115					120		
cgg	agt	gga	gaa	gtt	gaa	aac	aat	tca	gac	aac	tgc	gga	agg	tac	caa	438
Arg	Ser	Gly	Glu	Val	Glu	Asn	Asn	Ser	Asp	Asn	Ser	Gly	Arg	Tyr	Gln	
		125						130					135			
gga	ctg	gag	cac	aga	ggc	tca	gaa	gca	agt	cca	gct	ctc	ccg	ggg	ctg	486
Gly	Leu	Glu	His	Arg	Gly	Ser	Glu	Ala	Ser	Pro	Ala	Leu	Pro	Gly	Leu	
	140						145					150				
aag	ctg	agt	gca	gat	cag	gtg	gca	ctg	gtc	tac	agc	acg	ctg	ggg	ctc	534
Lys	Leu	Ser	Ala	Asp	Gln	Val	Ala	Leu	Val	Tyr	Ser	Thr	Leu	Gly	Leu	
	155					160					165					
tgc	ctg	tgt	gcc	gtc	ctc	tgc	tgc	ttc	ctg	gtg	gcg	gtg	gcc	tgc	ttc	582
Cys	Leu	Cys	Ala	Val	Leu	Cys	Cys	Phe	Leu	Val	Ala	Val	Ala	Cys	Phe	
170					175					180					185	
ctc	aag	atg	agg	ggg	gat	ccc	tgc	tcc	tgc	cag	ccc	cgc	tca	agg	ccc	630
Leu	Lys	Met	Arg	Gly	Asp	Pro	Cys	Ser	Cys	Gln	Pro	Arg	Ser	Arg	Pro	
				190					195					200		
cgt	caa	agt	ccg	gcc	aag	tct	tcc	cag	gat	cac	gcg	atg	gaa	gcc	ggc	678
Arg	Gln	Ser	Pro	Ala	Lys	Ser	Ser	Gln	Asp	His	Ala	Met	Glu	Ala	Gly	
			205					210					215			
agc	cct	gtg	agc	aca	tcc	ccc	gag	cca	gtg	gag	acc	tgc	agc	ttc	tgc	726
Ser	Pro	Val	Ser	Thr	Ser	Pro	Glu	Pro	Val	Glu	Thr	Cys	Ser	Phe	Cys	
		220					225					230				
ttc	cct	gag	tgc	agg	gcg	ccc	acg	cag	gag	agc	gca	gtc	acg	cct	ggg	774
Phe	Pro	Glu	Cys	Arg	Ala	Pro	Thr	Gln	Glu	Ser	Ala	Val	Thr	Pro	Gly	
	235					240					245					
acc	ccc	gac	ccc	act	tgt	gct	gga	agg	tgg	ggg	tgc	cac	acc	agg	acc	822
Thr	Pro	Asp	Pro	Thr	Cys	Ala	Gly	Arg	Trp	Gly	Cys	His	Thr	Arg	Thr	
250					255					260					265	
aca	gtc	ctg	cag	cct	tgc	cca	cac	atc	cca	gac	agc	ggc	ctt	ggc	att	870
Thr	Val	Leu	Gln	Pro	Cys	Pro	His	Ile	Pro	Asp	Ser	Gly	Leu	Gly	Ile	
				270					275					280		
gtg	tgt	gtg	cct	gcc	cag	gag	ggg	ggc	cca	ggt	gca	taa	atggggg			916
Val	Cys	Val	Pro	Ala	Gln	Glu	Gly	Gly	Pro	Gly	Ala					
			285					290								
tcagggagg	ggg	aaaggaggag	ggagagagat	ggagaggagg	ggagagagaa	agagaggtgg										976
ggagagggga	gagagatatg	aggagagaga	gacagaggag	gcagagaggg	agagaaacag											1036
aggagacaga	gagggagaga	gagacagagg	gagagagaga	cagagaggaa	gagaggcaga											1096
gagggaaaga	ggcagagaag	gaaagagaca	ggcagagaag	gagagaggca	gagagggaga											1156

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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<210> 42
<211> 293
<212> PRT
<213> Homo sapiens
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Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
50 55 60

Phe Cys Arg Ser ~~Leu~~ Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
65 70 75 80

His Leu Leu Arg/Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
115 120 125

Asn Ser ~~Asp~~ Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
145 150 155 160

~~Ala~~ Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys
165 170 175

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val

	100		105		110										
Asn	Leu	Pro	Pro	Glu	Leu	Arg	Arg	Gln	Arg	Ser	Gly	Glu	Val	Glu	Asn
	115						120					125			
Asn	Ser	Asp	Asn	Ser	Gly	Arg	Tyr	Gln	Gly	Leu	Glu	His	Arg	Gly	Ser
	130					135					140				
Glu	Ala	Ser	Pro	Ala	Leu	Pro	Gly	Leu	Lys	Leu	Ser	Ala	Asp	Gln	Val
	145				150					155					160
Ala	Val	Tyr	Ser	Thr	Leu	Gly	Leu	Cys	Leu	Cys	Ala	Val	Leu	Cys	Cys
				165					170					175	
Phe	Leu	Val	Ala	Val	Ala	Cys	Phe	Leu	Lys	Met	Arg	Gly	Asp	Pro	Cys
			180					185					190		
Ser	Cys	Gln	Pro	Arg	Ser	Arg	Pro	Arg	Gln	Ser	Pro	Ala	Lys	Ser	Ser
		195					200					205			
Gln	Asp	His	Ala	Met	Glu	Ala	Gly	Ser	Pro	Val	Ser	Thr	Ser	Pro	Glu
	210					215					220				
Pro	Val	Glu	Thr	Cys	Ser	Phe	Cys	Phe	Pro	Glu	Cys	Arg	Ala	Pro	Thr
	225				230					235					240
Gln	Glu	Ser	Ala	Val	Thr	Pro	Gly	Thr	Pro	Asp	Thr	Cys	Ala	Gly	Arg
				245					250					255	
Trp	Gly	Cys	His	Thr	Arg	Thr	Thr	Val	Leu	Gln	Pro	Cys	Pro	His	Ile
			260					265					270		
Pro	Asp	Ser	Gly	Leu	Gly	Ile	Val	Cys	Gly	Pro	Ala	Gln	Glu	Gly	Gly
		275					280					285			
Pro	Gly	Ala													
	290														

<210> 44

<211> 32

<212> PRT

<213> Homo sapiens

<400> 44

Met	Ser	Gly	Leu	Gly	Arg	Ser	Arg	Arg	Gly	Gly	Arg	Ser	Arg	Val	Asp
1			5						10					15	

Gln	Glu	Glu	Arg	Phe	Pro	Gln	Gly	Leu	Trp	Thr	Gly	Val	Ala	Met	Arg
			20					25					30		

<210> 45

<211> 37

<212> PRT

<213> Homo sapiens

<400> 45

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
1 5 10 15

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
20 25 30

Phe Cys Arg Ser Leu
35

<210> 46

<211> 38

<212> PRT

<213> Homo sapiens

<400> 46

Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp His Leu Leu Arg Asp
1 5 10 15

Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His Pro Lys Gln Cys Ala
20 25 30

Tyr Phe Cys Glu Asn Lys
35

<210> 47

<211> 57

<212> PRT

<213> Homo sapiens

<400> 47

Leu Arg Ser Pro Val Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser
1 5 10 15

Gly Glu Val Glu Asn Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu
20 25 30

Glu His Arg Gly Ser Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu
35 40 45

Ser Ala Asp Gln Val Ala Val Tyr Ser
50 55

<210> 48

<211> 21

<212> PRT

<213> Homo sapiens

<400> 48

Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys Cys Phe Leu Val Ala
1 5 10 15

Val Ala Cys Phe Leu
20

<210> 49

<211> 106

<212> PRT

<213> Homo sapiens

<400> 49

Lys Met Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg
1 5 10 15

Gln Ser Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly Ser
20 25 30

Pro Val Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys Phe
35 40 45

Pro Glu Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly Thr
50 55 60

Pro Asp Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val
65 70 75 80

Leu Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys
85 90 95

Gly Pro Ala Gln Glu Gly Gly Pro Gly Ala
100 105

<210> 50

<211> 32

<212> DNA

<213> Homo sapiens

<400> 50

tctccaagct tccgatcctg agtaatgagt gg

<210> 51

<211> 34

<213> Homo sapiens

34

<211> 6

<213> Homo sapiens

Gly Ala Leu Lys Leu Leu
1 5